

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, DC. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR ATTORNEY DOCKET N		CONFIRMATION NO.	
09/277,312	03/26/1999	MARK R. BUCKINGHAM	53836USA1A	3332	
32692	7590 11/12/2002				
3M INNOVATIVE PROPERTIES COMPANY			EXAMI	EXAMINER	
PO BOX 33427			SZEKEI V	SZEKELY, PETER A	
ST. PAUL, M	N 55133-3427		SEERCE 1,1 LIER A		
			ART UNIT	PAPER NUMBER	
			1714	20	
			DATE MAILED: 11/12/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

•				<u> </u>
		Applicati n No.	Applicant(s)	
Offic Action Summary		09/277,312	BUCKINGHAM ET AL.	
		Examiner	Art Unit	
		Peter Szekely	1714	
Period f	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the c	orrespondence addres:	s
THE - External control	IORTENED STATUTORY PERIOD FOR REPL' MAILING DATE OF THIS COMMUNICATION. Unisions of time may be available under the provisions of 37 CFR 1.1  SIX (6) MONTHS from the mailing date of this communication. The period for reply specified above is less than thirty (30) days, a replication of the period for reply is specified above, the maximum statutory period ure to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tin y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this commur D (35 U.S.C. § 133).	nication.
1)🛛	Responsive to communication(s) filed on 30 s	September 2002 .		
2a)	This action is <b>FINAL</b> . 2b)⊠ Th	is action is non-final.		
3)∏ Disposit	Since this application is in condition for allows closed in accordance with the practice under ion of Claims	ance except for formal matters, pr Ex parte Quayle, 1935 C.D. 11, 4	rosecution as to the me I53 O.G. 213.	erits is
4)⊠	Claim(s) 16-26 is/are pending in the application	on.		
	4a) Of the above claim(s) is/are withdraw	wn from consideration.		
5)	Claim(s) is/are allowed.			
6)⊠	Claim(s) 16-26 is/are rejected.			
7)	Claim(s) is/are objected to.			
	Claim(s) are subject to restriction and/o ion Papers	r election requirement.		
9)[	The specification is objected to by the Examine	r.		
10)	The drawing(s) filed on is/are: a) accept	oted or b) objected to by the Exam	miner.	
	Applicant may not request that any objection to the	e drawing(s) be held in abeyance. So	ee 37 CFR 1.85(a).	
11)	The proposed drawing correction filed on	_is: a) ☐ approved b) ☐ disappro	ved by the Examiner.	
	If approved, corrected drawings are required in rep	bly to this Office action.		
12)	The oath or declaration is objected to by the Ex	aminer.		
Priority (	ınder 35 U.S.C. §§ 119 and 120			
13)	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	)-(d) or (f).	
a)	All b) Some * c) None of:			
	1. Certified copies of the priority documents	s have been received.		
	2. Certified copies of the priority documents	s have been received in Application	on No	
* 9	3. Copies of the certified copies of the prior application from the International Bur See the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).		e
	cknowledgment is made of a claim for domestic	•		lication).
	) ☐ The translation of the foreign language pro Acknowledgment is made of a claim for domesti			
Attachmen		,,	·	
) 🔲 Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)		(PTO-413) Paper No(s) Patent Application (PTO-152)	

Application/Control Number: 09/277,312

Art Unit: 1714

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 2. Claims 16-26 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a process for preparing a flexible, solid, fire sealing composition including the step of high shear mixing in a substantially volatile-free state: (a) water-insoluble intumescent mineral granules, (b) a halogen free organic binder, and (c) a phosphorus containing flame retardant, wherein the resulting composition has a softness value (penetrometer) of from about 0.01 to about 3.75 mm, does not reasonably provide enablement for a method of preparing a flexible, solid intumescent fire barrier material including an intumescent material and an organic binder, comprising the steps of: (a) providing a mixture of intumescent material and organic binder in a substantially volatile free state; (b) mixing the mixture at high shear conditions. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. See page 3, lines 9-14 of the specification.
- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Page 3

Application/Control Number: 09/277,312

Art Unit: 1714

4. Claims 17,19, 21, 22 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. The above claims contain improper Markush language.

## Claim Rejections - 35 USC § 102

- 6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 7. Claims 16-26 are rejected under 35 U.S.C. 102(b or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Welna 5,578,671, Okisaki et al. 5,810,914, Horacek 6,031,040 or Gato 6,124,394, in view of von Bonin et al. 4,694,030, von Bonin 4,729,853, von Bonin 5,053,148, .von Bonin 5,094,780, von Bonin et al. 5,173,515 or von Bonin 5,382,387.
- 8. All the cited references have been discussed in previous actions. All four primary references disclose organic binders and intumescent materials, which have been discussed in detail great in Papers #4, #7, #11 and #16, which ingredients are blended together in the absence of solvents of water. As far as the means of mixing are concerned, Welna discloses a Brabender mixer in column 10, lines 23-30, Okisaki et al. teach extrusion kneading in Examples 14 and 15, Horacek recites extrusion mixing in column 2, lines 33-35 and Goto et al. reveal a Henschel mixer in column 7, line 39. All the above blenders are high shear mixers. The secondary references are cited only to show that all of the ingredients mentioned in the instant application are usual and customary components of intumescent, fire resistant materials, and as such their use

Page 4

Application/Control Number: 09/277,312

Art Unit: 1714

would have been obvious to one having ordinary skill in the art, at the time the invention was made.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Szekely whose telephone number is 703-308-2460. The examiner can normally be reached on Tuesday-Friday 7:00 a.m.-5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Peter Szekely Primary Examiner Art Unit 1714

P.S. November 8, 2002